Healthy Kansans living in safe and sustainable environments.

Changes to the KDHE Infectious or Contagious Diseases and Conditions Regulations

Sheri Tubach
Chelsea Raybern
Infectious Disease Epidemiology and Response

Bureau of Epidemiology and Public Health Informatics

Kansas
Department of Health and Environment

Agenda

- Training Session 1
  - Mandated Reporting and Specimen Submission Requirements
- Training Session 2
  - Isolation and Quarantine Requirements
  - Rabies Control Requirements

Objectives

- Know what infectious diseases are reportable.
- Know the timeframe and method of reporting.
- Understand the changes to the isolation and quarantine regulation.
- Understand the changes to the rabies control regulation.

Agenda

Regulations	Topic	Time
KAR 28-1-2	Public Health in Kansas Mandating Reporting	15 minutes
	Changes to the reporting timeframe and reportable disease list	45 minutes
KAR 28-1-4	Hospital Reporting Requirements	15 minutes
KAR 28-1-18	Laboratory reporting and specimen submission guidelines	15 minutes
	Q & A	15 minutes

Kansas
Department of Health and Environment

Three Levels of Public Health

- Local: Local Health Departments
- State: State Health Departments
- National: CDC
- Not a hierarchy

Local Health Departments

- Counties or cities
- First level of contact with public
- Broad power for control measures in Kansas
- Outbreak investigations:
  - foodborne, others
- Surveillance:
  - reportable diseases
- Special projects:
  - usually upon involvement from state/national level

State Health Department

- Broad statutory and regulatory power
- Outbreak investigations:
  - assists local health departments
  - interstate outbreaks
- Surveillance:
  - list of reportable diseases
  - transmit reports to CDC
  - prepare state reports
  - other data sets: cancer registry, hospital discharge
  - KS health information system
- Analytic projects

National Level – CDC

- Outbreak investigations:
  - EPI-Aid
- Surveillance:
  - MMWR
  - National surveys
  - Other special surveillance projects
- Analytic projects:
  - Often with local/states

Different Purposes and Methods

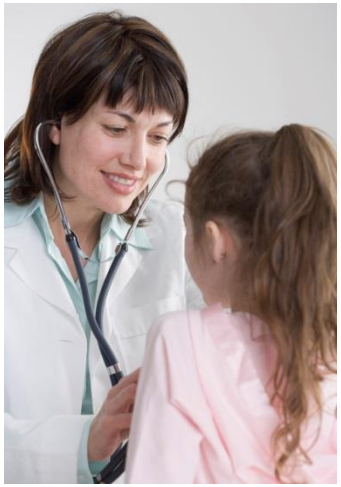
- State/local level:
  - Purpose: Link to immediate control efforts/program evaluation.
  - Methods: Real-time data on all cases.
- Federal level:
  - Purpose: Monitor national trends, detect emerging problems, demonstrate need for resources.
  - Methods: aggregate local data, national sample surveys.

Surveillance at the State/Local Level is Linked to Control Activities

- Case level: Assure appropriate treatment
  - Example: Botulism
- Contact level: Assure contacts are treated
  - Example: Pertussis in high risk contacts
- Community level: Remove source of outbreaks
  - Example: Listeria in ice cream
- Program level: Monitor effectiveness in real time
  - Example: Vaccination

Methods of Surveillance – How Do We Capture the Information?

- Passive surveillance: no regular active contact to reporters
- Disease reporting from MDs, facilities, labs
  - communicable disease and condition reporting



CDC

World Health Organization

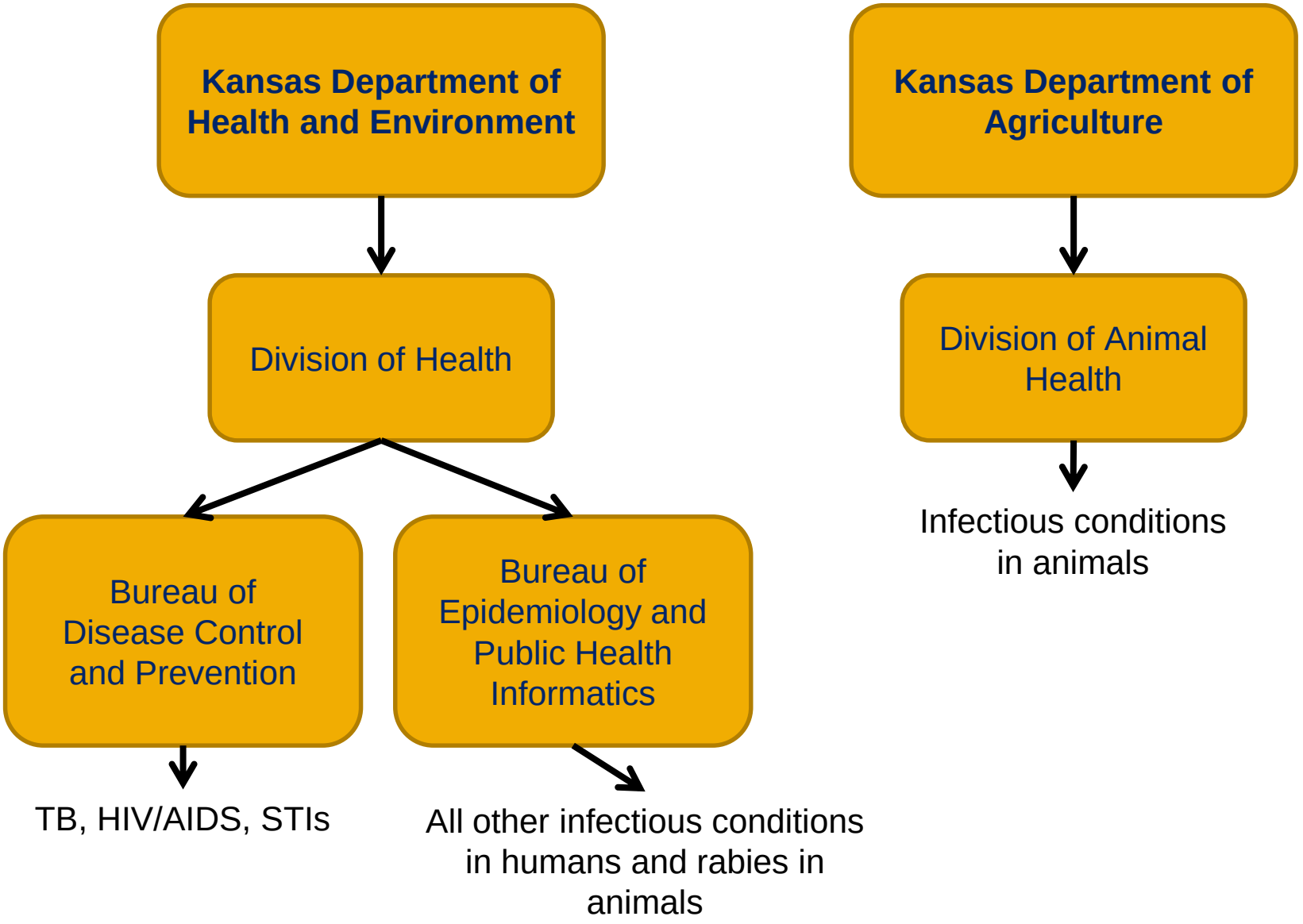
Surveillance / Case Reporting

- Determined by states
- Some standardization desirable
  - Nationally notifiable conditions
  - Case definitions
- Council of State and Territorial Epidemiologists
  - Since 1951
- Collaborative process

The National Notifiable Disease Surveillance System (NNDSS)

- Recommended list of conditions under surveillance (CDC and CSTE).
- States implement national list according to local considerations through statute/regulatory process.
- States collect standard data elements and apply standard case definitions (CDC/CSTE).
- States forward individual case-level data to CDC without identifiers on a voluntary basis.

Reportable Diseases in Kansas



Why do we investigate?

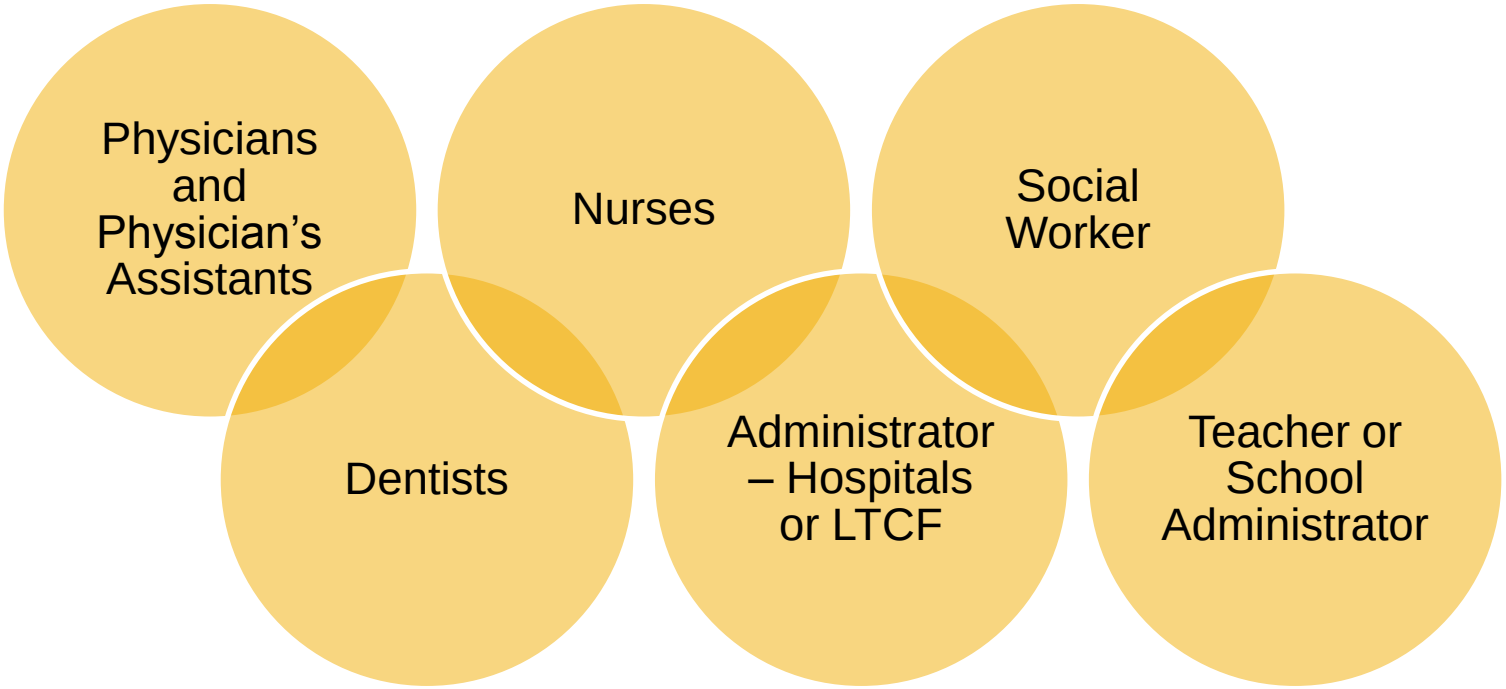
Why Investigate?

- To prevent the spread of illness!
- Trace disease source and spread
- Identify outbreaks
- Implement control and prevention measures
- Gain information for policy, education
  - Used by state, CDC
  - Design disease control activities
  - Evaluate programs and vaccine efficacy

Mandated Reporting

Who Reports?

KSA 65-118



Immunity for reporting
Confidential

What to report?

- First and last name
- Address
- Telephone number
- Date of birth
- Sex
- Race
- Ethnicity
- Pregnancy status
- Date of symptom onset
- Diagnosis
- Diagnostic tests
- Type and site of specimen
- Date of specimen collection
- Results
- Treatment
- Name, address, and telephone of attending physician

Kansas Department of Health and Environment

How to Report

KSA 65-118
KAR 28-1-2

4-Hour Reportable Diseases

Kansas Department of Health and Environment

All Other Reportable Diseases

Local Health Department

Laboratory Reporting

KSA 65-118
KAR 28-1-18

4-Hour Reportable Diseases

All Other Reportable Diseases

Kansas Department of Health
and Environment

Laboratory Reporting

KSA 65-118
KAR 28-1-18

Questions

Update to KAR 28-1-2 Reporting Requirements of Infectious or Contagious Diseases and Conditions

Kansas
Department of Health and Environment

Rationale for Revisions

- Last revised in 2006
  - Harmonization with Nationally Notifiable Conditions list desirable
- Changes in terminology
- K.A.R. 28-1-2 limited to infectious diseases, so conditions required to be reported in several places
- Inadequate information reported
- Need for more rapid reporting and updated methods (ELR)

Time Frames to Report

- Previous Requirements
  - 4 hours by telephone for urgent conditions
  - 7 days for others
- Current Requirements
  - 4 hours by telephone for urgent conditions *(no change)*
  - 24 hours for all others
    - Grace period for weekends and holidays

New 4-hour Reportable Diseases

- Changed reporting from 7 days to 4 hours
  - Diphtheria
  - Tetanus
- New 4-hour reportable diseases
  - Novel influenza A virus
  - Vaccinia, post-vaccination or secondary transmission
  - Viral hemorrhagic fevers
  - Unexplained death suspected to be due to an unidentified infectious agent

Novel Influenza A

- Human infections with novel influenza A viruses may signal the beginning of an influenza pandemic
- Rapid detection and reporting of human infections with novel influenza A viruses
  - Prompt detection and characterization of the virus
  - Determine the potential for a pandemic
  - Accelerate the implementation of effective public health responses

Novel Influenza A

- Different from currently circulating human influenza H1 and H3 viruses
- H2, H5, H7, and H9 subtypes
- Influenza H1 and H3 subtypes
  - from a non-human species
  - genetic reassortment between animal and human viruses
- Novel subtypes are detected by State Public Health Laboratory and confirmed at CDC

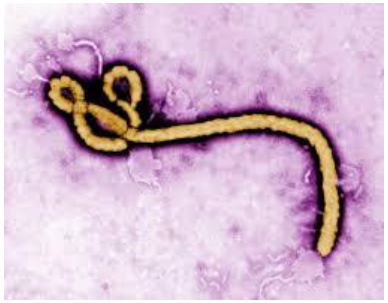
Vaccinia

- Purpose of reporting and surveillance
  - To identify vaccinia disease developing in a person or close contact following a smallpox vaccination
  - To ensure prompt evaluation and treatment as appropriate, and prevent secondary transmission
  - To ensure reporting of such events to the Vaccine Adverse Events Reporting Systems (VAERS) to track the frequency and epidemiology of such events
- Primary and secondary cases are reportable
- Vaccinia immune globulin (VIG) is available

Vaccinia Disease

- Infection occurs following a smallpox vaccination
- Self-inoculation to a secondary site
- Transmission to another individual through contact with unhealed vaccination site
- Reported sites
  - Eye, face, nose, mouth, lips, genitalia, and anus

Viral Hemorrhagic Fever



- Includes Crimean-Congo hemorrhagic fever virus, Ebola virus, Lassa virus, Lujo virus, Marburg virus and the New World arenaviruses (Guanarito virus, Junin virus, Machupo virus, and Sabia virus
- Used to be reportable when identified in the course of a possible bioterrorism act
- Potential for natural introduction

Unexplained Deaths

- Purpose of reporting and surveillance
  - To identify emerging pathogens in Kansas
  - To raise the index of suspicion of a possible bioterrorism event
  - To recognize infectious diseases with potential public health impact

Unexplained Deaths – When to Report

- Clinically consistent with hallmarks of an infectious process
  - Fever
  - Leukocytosis
  - Histopathologic evidence of an acute infectious process
  - Physician-diagnosed syndrome
- Preliminary testing has not revealed a cause
- Absence of a chronic or immunocompromising condition, no trauma, no toxic exposure, no preceding nosocomial infection

Diseases Removed from the 4-hour Reportable List

- Not reportable
  - Bacterial Meningitis
  - Unless meningitis is thought to be caused by a reportable disease
- Now reportable within 24 hours
  - Pertussis
  - Rabies, animals

Still Reportable – 4-Hours

- Clusters, outbreaks, and epidemics
- Terrorist acts
  - Biological
  - Chemical
  - Radiological
- Unusual disease or manifestation of illness

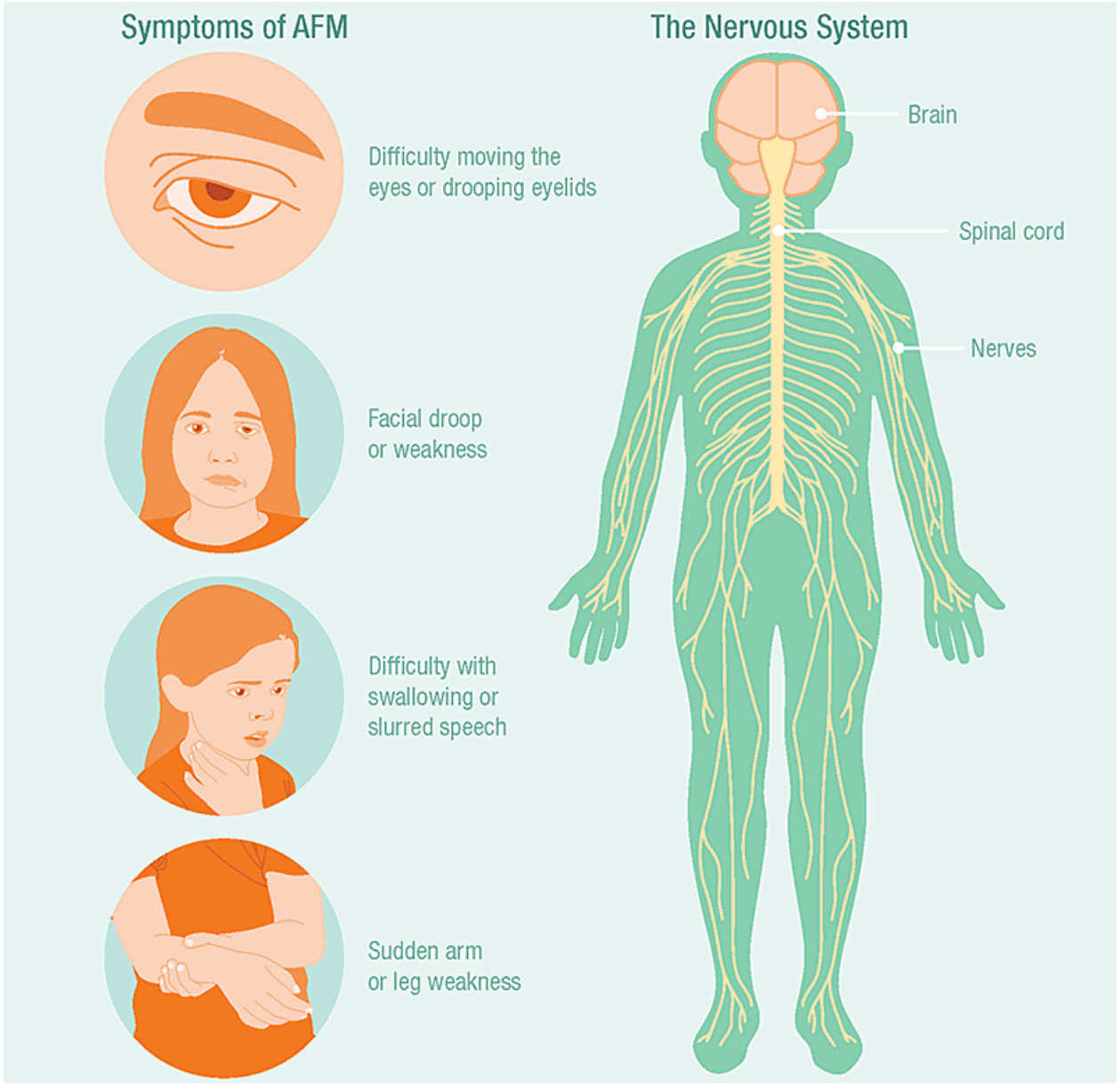
Diseases Added to the 24-hour Reportable List

- Acute flaccid myelitis
- Anaplasmosis
- Babesiosis
- Blood lead levels (any results)
- *Candida auris*
- Carbapenem-resistant bacterial infections or colonization
- Carbon monoxide poisoning
- Coccidioidomycosis
- Hepatitis B in children < 5 years – All lab results
- Histoplasmosis
- Leptospirosis
- Vancomycin-intermediate *S. aureus*
- Vancomycin-resistant *S. aureus*
- Vibriosis (non-cholera Vibrio spp.)

Harmonization with Nationally Notifiable Conditions list

- Babesiosis
- Coccidioidomycosis
- Hepatitis A
- Histoplasmosis
- Leptospirosis
- Vancomycin-intermediate *S. aureus* (VISA)
- Vancomycin-resistant *S. aureus (VRSA)*
- Vibriosis (non-cholera Vibrio spp.)

Acute Flaccid Myelitis (AFM)



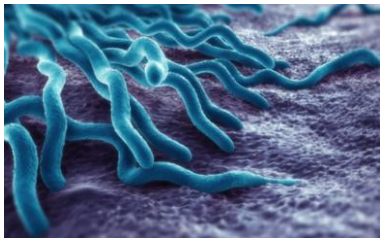
AFM Specimen Collection

Specimen Collection	Specimen submission
Cerebrospinal fluid (CSF)	Submit to CDC for testing
Blood (serum and whole blood)	Submit to CDC for testing
Stool, preferably two stool specimens collected as soon after onset of limb weakness and separated by 24 hours	Submit to CDC for testing
Upper respiratory tract, preferably nasopharyngeal (NP) OR nasal (mid-turbinate [MT]) + oropharyngeal (OP) swab	Submit to CDC for testing ONLY if tested positive for enterovirus or rhinovirus at external lab

KDHE will coordinate all shipping to CDC

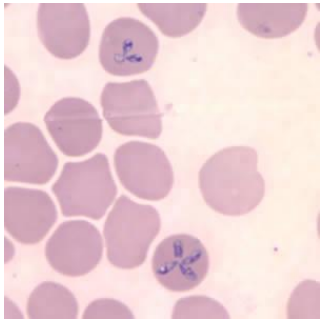
Kansas Department of Health and Environment

Anaplasmosis



- Anaplasmosis is a disease caused by the bacterium *Anaplasma phagocytophilum*
- This organism was previously known by
  - *Ehrlichia equi*
  - *Ehrlichia phagocytophilum*,
- Disease was previously known as human granulocytic ehrlichiosis (HGE)
- Change in 2001 identified that this organism belonged to the genus *Anaplasma*

Babesiosis



- Became nationally notifiable in 2011
- Parasitic tick-borne infection
  - Blacklegged tick (*Ixodes scapularis*)
- *Babesia* spp. can also be transmitted via blood products
- There is no licensed screening test available for detecting *Babesia* spp. in blood donors

Coccidioidomycosis (Valley Fever)

- Coccidioidomycosis is an infection of the lungs caused by the fungal species Coccidioides
- Coccidioides grow in soil, particularly in arid areas
- Infection occurs by inhaling contaminated dust with fungal spores
- **Purpose of Reporting and Surveillance**
  - To track the emergence of *Coccidioides* in Kansas
  - To monitor trends in the disease due to *Coccidioides*
- Nationally notifiable since 1995

Histoplasmosis

- Histoplasmosis is one of the most common endemic fungal infections in the United States
- Inhalation of spores found in soil contaminated with bird or bat droppings
- Not nationally notifiable
  - True number of cases is unknown and is difficult to ascertain
- Ten states track cases
  - Most in the central states

Leptospirosis

- Re-emerging bacterial disease affecting both humans and animals
- Incidence is increasing and exposure shifting from occupational to recreational (Climate Change?)
- 100-200 human cases of leptospirosis reported annually through 1994
- 1995- ceased to be a nationally notifiable condition
- Remained reportable disease in 36 states and territories
- In 2013 became nationally notifiable again

Hepatitis A

- Previously all positive Hepatitis A were reportable
- Total antibody positive – most likely immunity not disease
- Only IgM + results are reportable

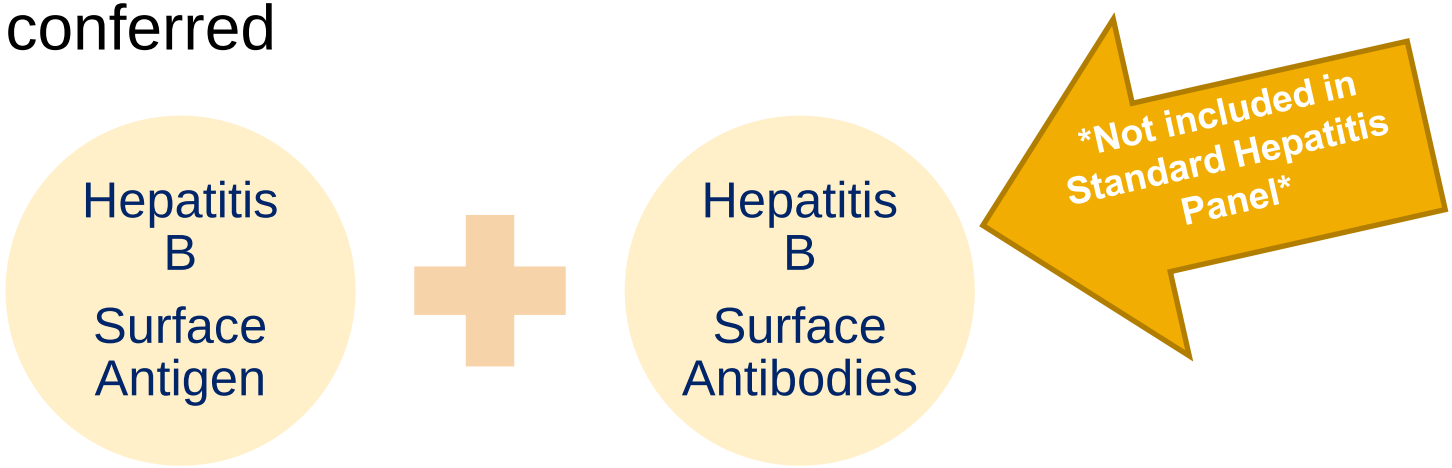
Hepatitis B in children < 5 years – All lab results

- Perinatal Hepatitis B Prevention Program
  - Ensures prevention of transmission of hepatitis B from mother to infant during birth
  - Metrics of the Program
    - HBIG and hepatitis B birth dose given within 12 hours
    - Completion of the 3-dose series
    - Post vaccination serological testing (PVST)

PVST

Post-vaccination serological testing (PVST)

- Ensures infant is not infected AND immunity has been conferred



Determines Infection Status

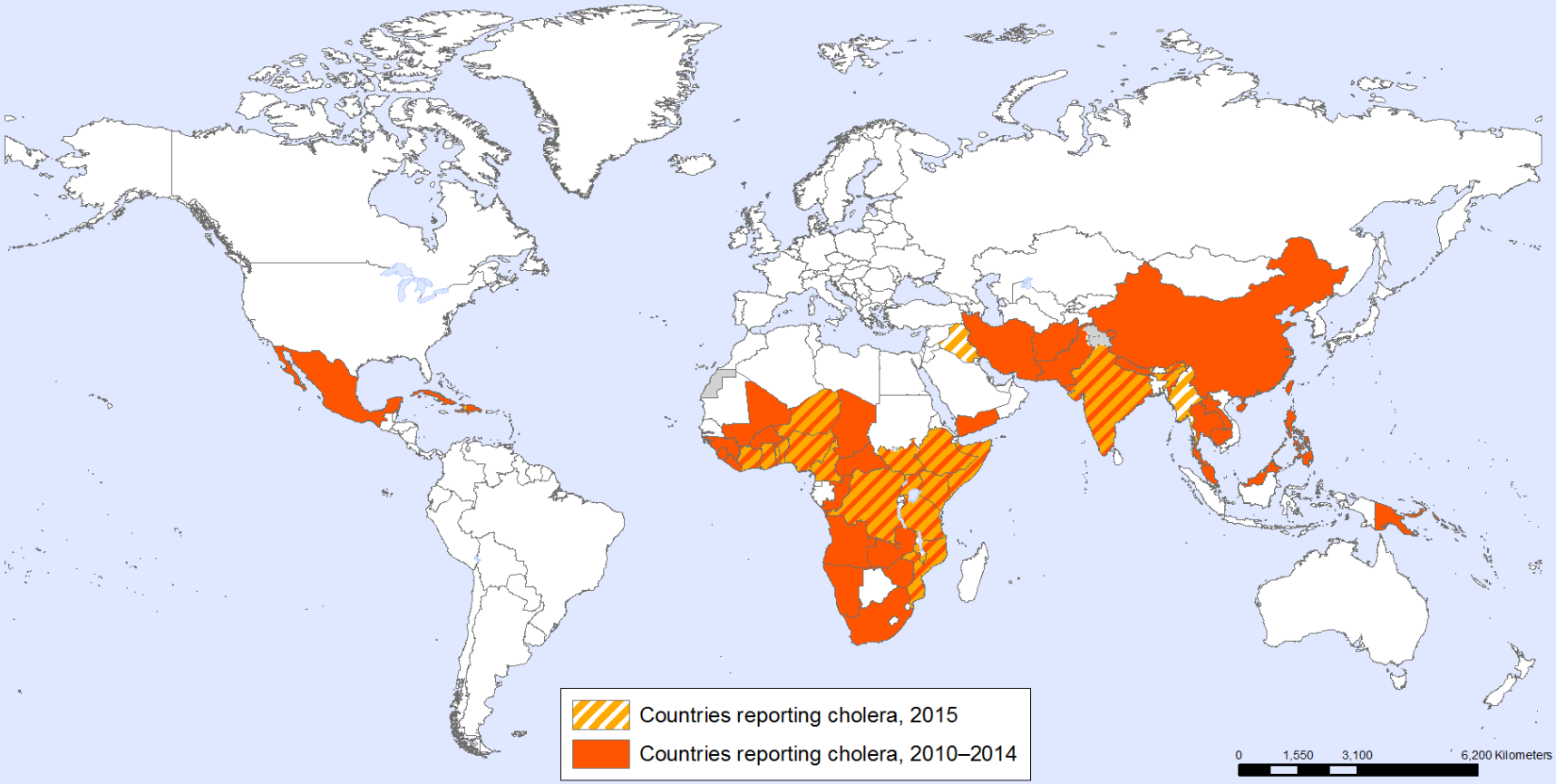
Determines Immunity Status

Vibriosis and Cholera

Cholera

- Profuse watery diarrhea, vomiting, and leg cramps
- Toxigenic *Vibrio cholerae* (serogroup O1 or O139)
- 12 hours to 5 days for symptoms to appear
- Inadequate water treatment, poor sanitation, and inadequate hygiene
- Rare in the US (0-5 cases annually)
- Last case in Kansas was in 1988

Countries reporting cholera, 2010–2015

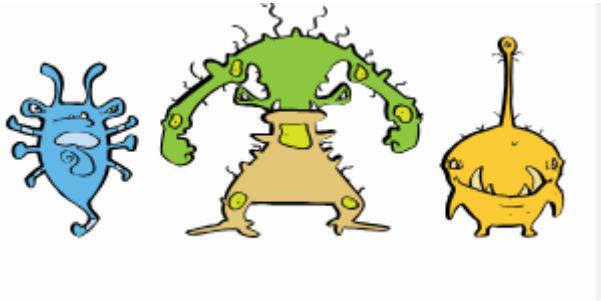


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Information Evidence and Research (IER)
World Health Organization

World Health Organization

GI Panel



GI PANEL MENU

BACTERIA:

- *Campylobacter (jejuni, coli and upsaliensis)*
- *Clostridium difficile* (toxin A/B)
- *Plesiomonas shigelloides*
- *Salmonella*
- *Yersinia enterocolitica*
- *Vibrio (parahaemolyticus, vulnificus and cholerae)*
- *Vibrio cholerae*

DIARRHEAGENIC E. COLI/SHIGELLA:

- Enteroaggregative *E. coli* (EAEC)
- Enteropathogenic *E. coli* (EPEC)
- Enterotoxigenic *E. coli* (ETEC) *lt/st*
- Shiga-like toxin-producing *E. coli* (STEC) *stx1/stx2*
- *E. coli* O157
- *Shigella*/Enteroinvasive *E. coli* (EIEC)

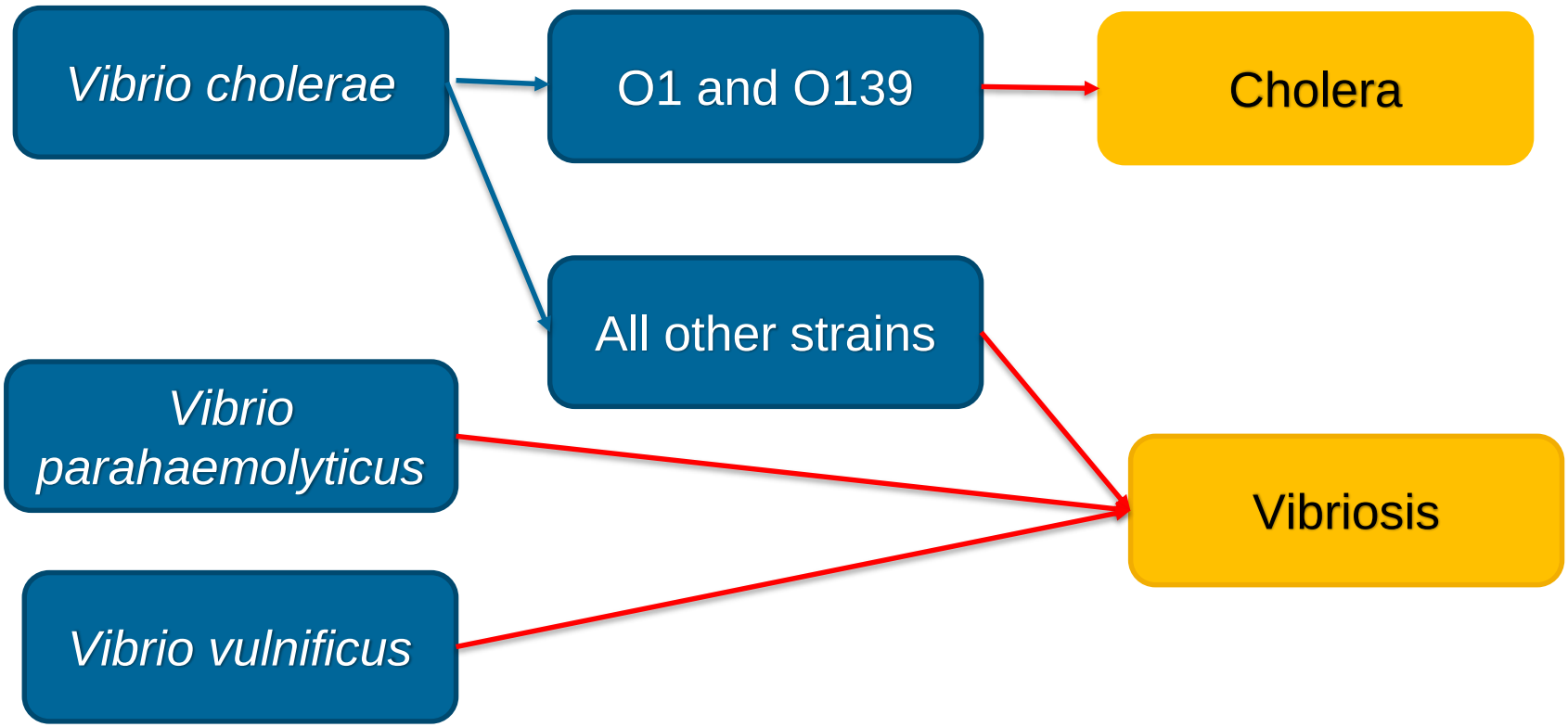
PARASITES:

- *Cryptosporidium*
- *Cyclospora cayetanensis*
- *Entamoeba histolytica*
- *Giardia lamblia*

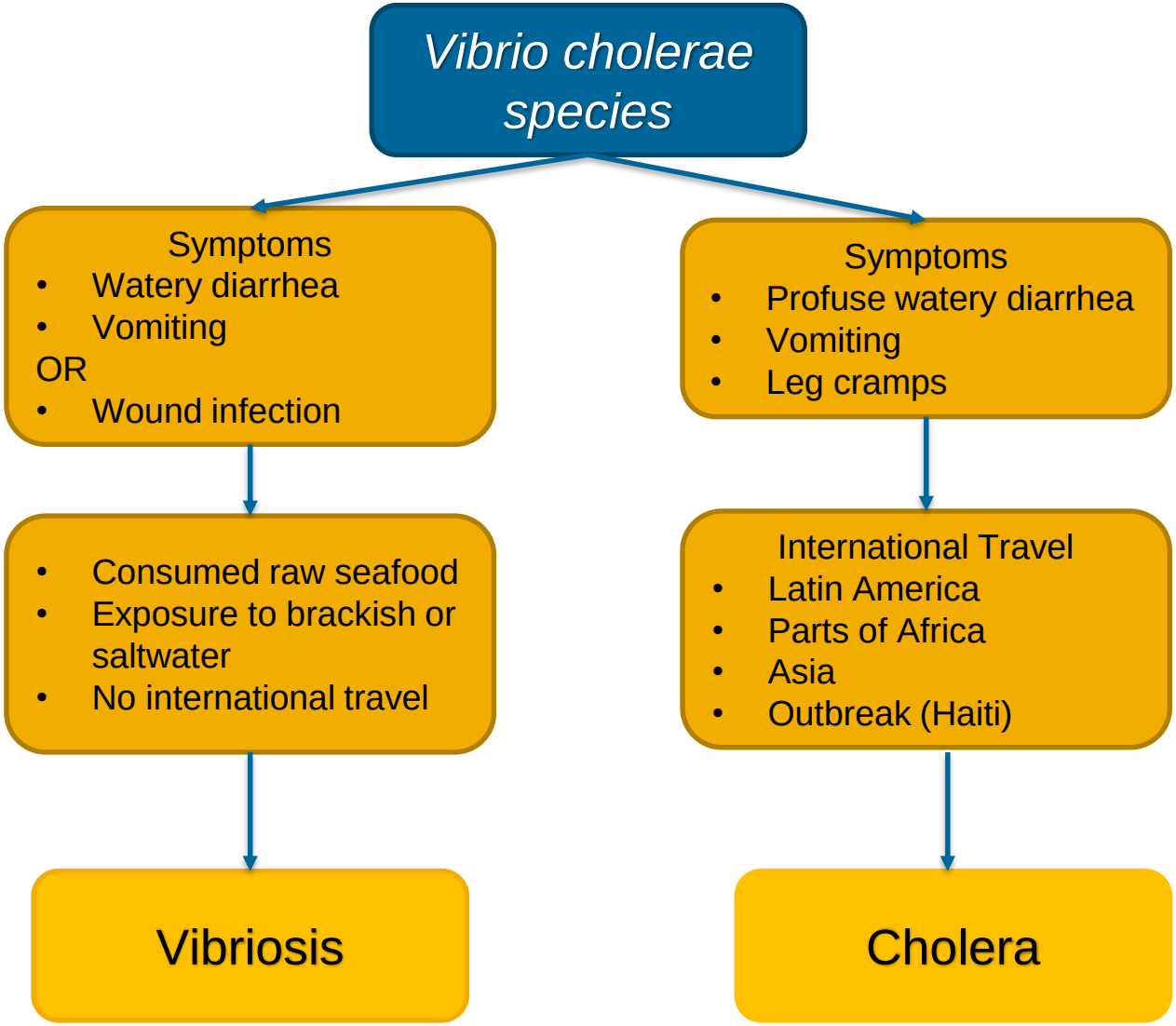
VIRUSES:

- Adenovirus F40/41
- Astrovirus
- Norovirus GI/GII
- Rotavirus A
- Sapovirus (I, II, IV & V)

Vibriosis and Cholera



Vibriosis OR Cholera



Multi-Drug Resistant Organisms (MDROS)

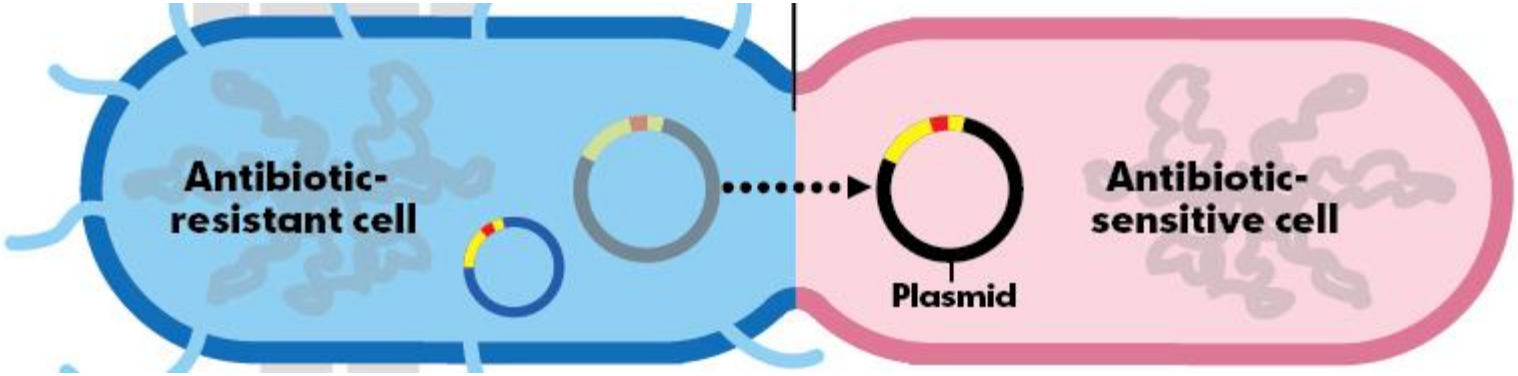
Kansas
Department of Health and Environment

Carbapenem-Resistant Enterobacteriaceae (CRE)

- Enterobacteriaceae are gut bacteria that can spread to other parts of the body causing infection
- These bacteria develop resistance to one or more carbapenem antibiotics
  - Ertapenem, imipenem, meropenem, and doripenem
- Carbapenems are often last resort antibiotic for difficult to treat infections

Carbapenemase-Producing (CRE)

- **Bacteria produce a carbapenemase enzyme that hydrolyze (destroy) antibiotics**
- **Five different enzymes have been discovered**
  - *Klebsiella pneumoniae* carbapenemase (KPC) most common in the United States
- **Genes encoded on mobile elements that can spread to other gram-negative bacteria**



Carbapenemase-Producing (CRE)

Enterobacteriaceae family (CRE)	*Acinetobacter* spp. (CRAB)	*Pseudomonas aeruginosa* (CRPA)
Resistant to any carbapenem: Ertapenem ≥2 µg/mL or ≤18 mm Doripenem ≥4 µg/mL or ≤19 mm Imipenem* ≥4 µg/mL or ≤19 mm Meropenem ≥4 µg/mL or ≤19 mm	**Resistant to any carbapenem:** Ertapenem N/A (excluded) Doripenem ≥8 µg/mL or ≤14 mm Imipenem ≥8 µg/mL or ≤18 mm Meropenem ≥8 µg/mL or ≤14 mm	**Resistant to any carbapenem:** Ertapenem N/A (excluded) Doripenem ≥8 µg/mL or ≤15 mm Imipenem ≥8 µg/mL or ≤15 mm Meropenem ≥8 µg/mL or ≤15 mm
OR **Any CRE, CRAB, or CRPA positive for carbapenemase by CIM, mCIM^{+}, CarbaNP, or PCR**		

Not Your Typical Fungi

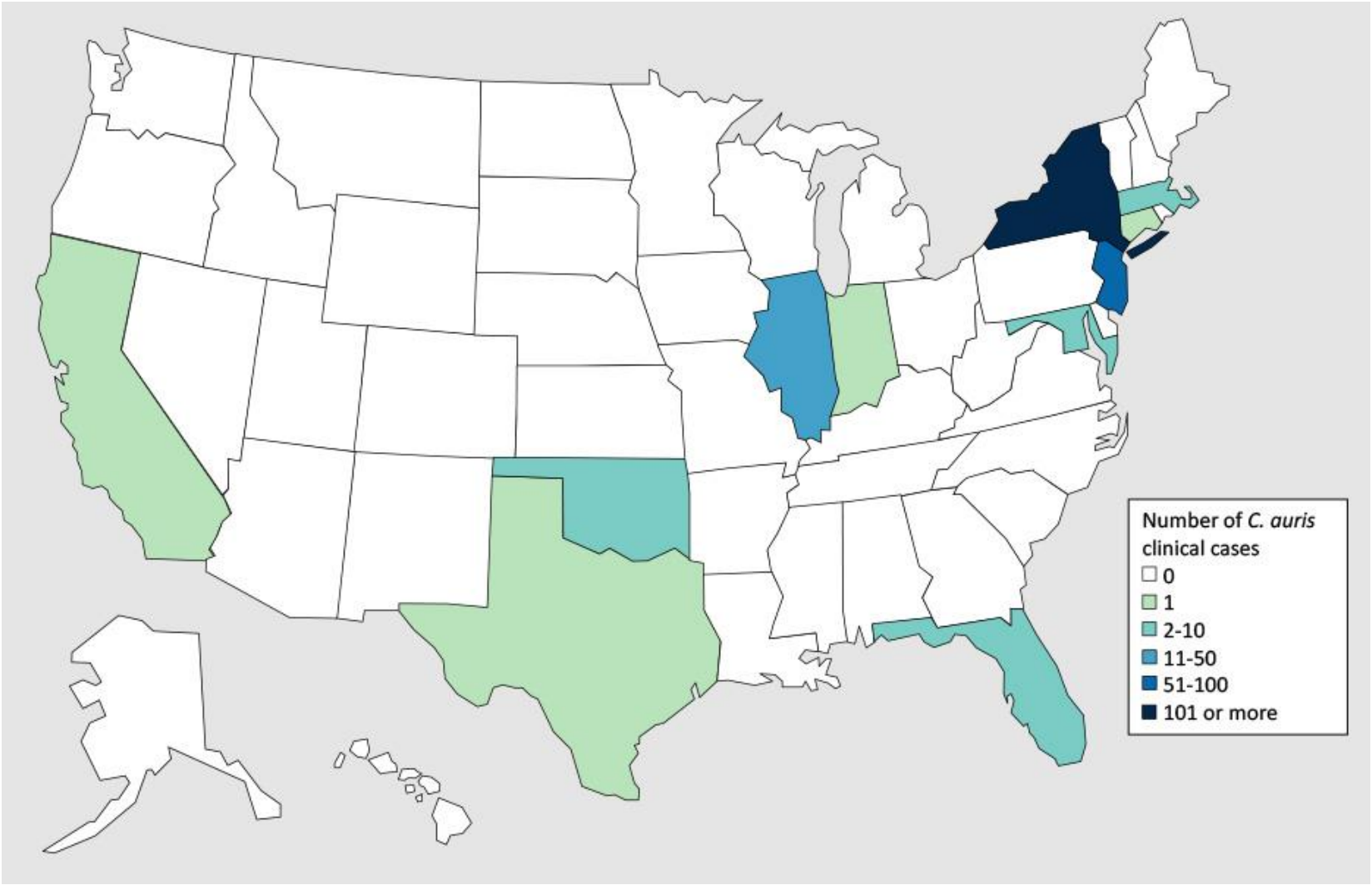
- **Invasive *Candida auris* mortality 30-60% (CDC)**
- **Contaminates patient environment**
- **Person-person transmission**
- **Prolonged colonization possible**
- **Difficult to detect**
- **Multidrug resistant**

Kansas Department of Health and Environment

Transmission

- **Direct contact with infected or colonized patient**
- **Direct contact with contaminated environment and fomites**
  - CDC study showed persistence >4 weeks on plastic surfaces (in lab)
- **Hardy organism**
  - Standard hospital products inadequate
  - Limited treatment options

US Map: Clinical cases of *C. auris* by state, May 31, 2018



C. auris Misidentified

Identification Method	Organism *C. auris* can be misidentified as:
Vitek 2 YST	*Candida haemulonii* *Candida duobushaemulonii* *Candida spp.* not identified
API 20C	*Rhodotorula glutinis* (characteristic red color not present) *Candida sake* Candida spp. not identified
BD Phoenix Yeast Identification System	*Candida haemulonii* *Candida catenulate* *Candida spp.* not identified
MicroScan	*Candida famata* *Candida guilliermondii** *Candida lusitaniae** *Candida parapsilosis** *Candida spp.* not identified
RapID Yeast Plus	*Candida parapsilosis** *Candida spp. not identified*

VISA and VRSA

- Staphylococcus aureus
- Intermediate or resistant to vancomycin
- Rare
- Nationally notifiable in 2004
- Monitor for emergence and increasing occurrence
  - Priority for CDC

Other Reportable Conditions

Blood Lead Poisoning

- All blood lead test results are reportable to KDHE within 24 hours
- If blood is being drawn at an external lab, or if samples are sent to a reference lab for analysis, a notifiable disease form is not needed
- Hospitals/clinics using a point of care machine should contact Laurie Render (laurie.render@ks.gov) to discuss test result reporting

Kansas Department of Health and Environment

Carbon Monoxide Poisoning

- All suspect carbon monoxide poisoning cases (regardless of test results) are reportable to KDHE within 24 hours
- Fax Carbon Monoxide Poisoning Reporting Form http://www.kdheks.gov/epi/disease_reporting.html to 877-427-7318

Today's date: _____

PATIENT INFORMATION

Name: _____
Last *First* *Middle*

Mobile phone: _____ **Home phone:** _____

Residential address: _____ **Apartment number:** _____

City: _____ **State:** _____ **Zip:** _____

Date of Birth (*if unknown, provide age*): _____

Race:
- ☐ White
- ☐ Black
- ☐ Asian
- ☐ American Indian / Alaska Native
- ☐ Native Hawaiian / Pacific Islander

Ethnicity:
- ☐ Hispanic
- ☐ Non-Hispanic

Sex:
- ☐ Male
- ☐ Female → **Pregnant?**
  - ☐ Yes
  - ☐ No
  - ☐ Unknown

EXPOSURE INFORMATION

Date and time of incident: _____ **Time:** ____ : ____ **AM or PM**

Site of exposure:
- ☐ Public Setting → **Public setting:**
  - ☐ Daycare
  - ☐ Health Care
  - ☐ Hotel
  - ☐ School
  - ☐ Nursing Home
  - ☐ Correctional Facility
  - ☐ Shelter
  - ☐ Restaurant
  - ☐ Other - _____
- ☐ Residential

Residential: ☐ Single Family Home ☐ Apartment Building ☐ Mobile Dwelling ☐ Duplex/Townhouse

Name and city of site of exposure: _____

Poisoning intent:
- ☐ Intentional CO poisoning
- ☐ Unintentional CO poisoning
- ☐ Unsure

Fire related:
- ☐ Yes
- ☐ No
- ☐ Unsure

Kansas Department of Health and Environment

Disease or Condition Information

Symptom onset date: _____

Hospitalized? ☐ Yes → **Hospital:** _____ **Died?** ☐ Yes
☐ No ☐ No
☐ Unknown

Laboratory name: _____ **Specimen collection date:** _____

Test(s) performed: _____ **Test result(s):** _____

Facility and Physician Information

Facility name: _____ **Facility city:** _____

Physician name: _____ **Phone #:** _____

Name of person reporting: _____ **Phone #:** _____

Treatment Information

Treated? ☐ Yes → **Treatment type, dosage, and duration:** _____
☐ No
☐ Unknown

Kansas Department of Health and Environment

Suspect Cases – 24 Hour Reportable

- Need a case report form
  - Acute Flaccid Myelitis
  - Carbon monoxide
  - Chickenpox
  - Hansen's disease (Leprosy)
  - Hantavirus
  - Hemolytic uremic syndrome
  - Pediatric influenza deaths
  - Trichinosis
  - Whooping cough (Pertussis)

Questions

Update to KAR 28-1-4
Hospital Reporting Requirements

Kansas
Department of Health
and Environment

Hospital Reporting Requirements*

Number of laboratory tests

Number of pharmacy prescriptions

Number of ER visits

* If information can be provided with minimum additional burden

Update to KAR 28-1-18 Reporting and Submission Requirements for Laboratories

Kansas
Department of Health and Environment

Laboratory Reporting

Reportable Diseases → 

Electronic Laboratory Reporting (ELR)

4-Hour Reportable Diseases → 

Kansas Department of Health and Environment

Specimens

1. Isolates of positive cultures
2. Original clinical specimen
3. Nucleic acid
4. Other clinical material

Laboratory Specimen Submission Requirements

- *Candida auris*
- *Carbapenem-resistant organisms*
- *Haemophilus influenzae* (pts. w/ invasive disease)
- *Listeria spp.*
- *Mycobacterium tuberculosis*
- *Neisseria meningitidis*
- *Salmonella spp.*
- Shiga toxin-producing *E. coli*
- *Shigella spp.*
- *Streptococcus pneumoniae* (invasive disease)
- *Vibrio spp.*

Questions


BREAK

Isolation and Quarantine
Rabies Control

Kansas
Department of Health
and Environment

Agenda

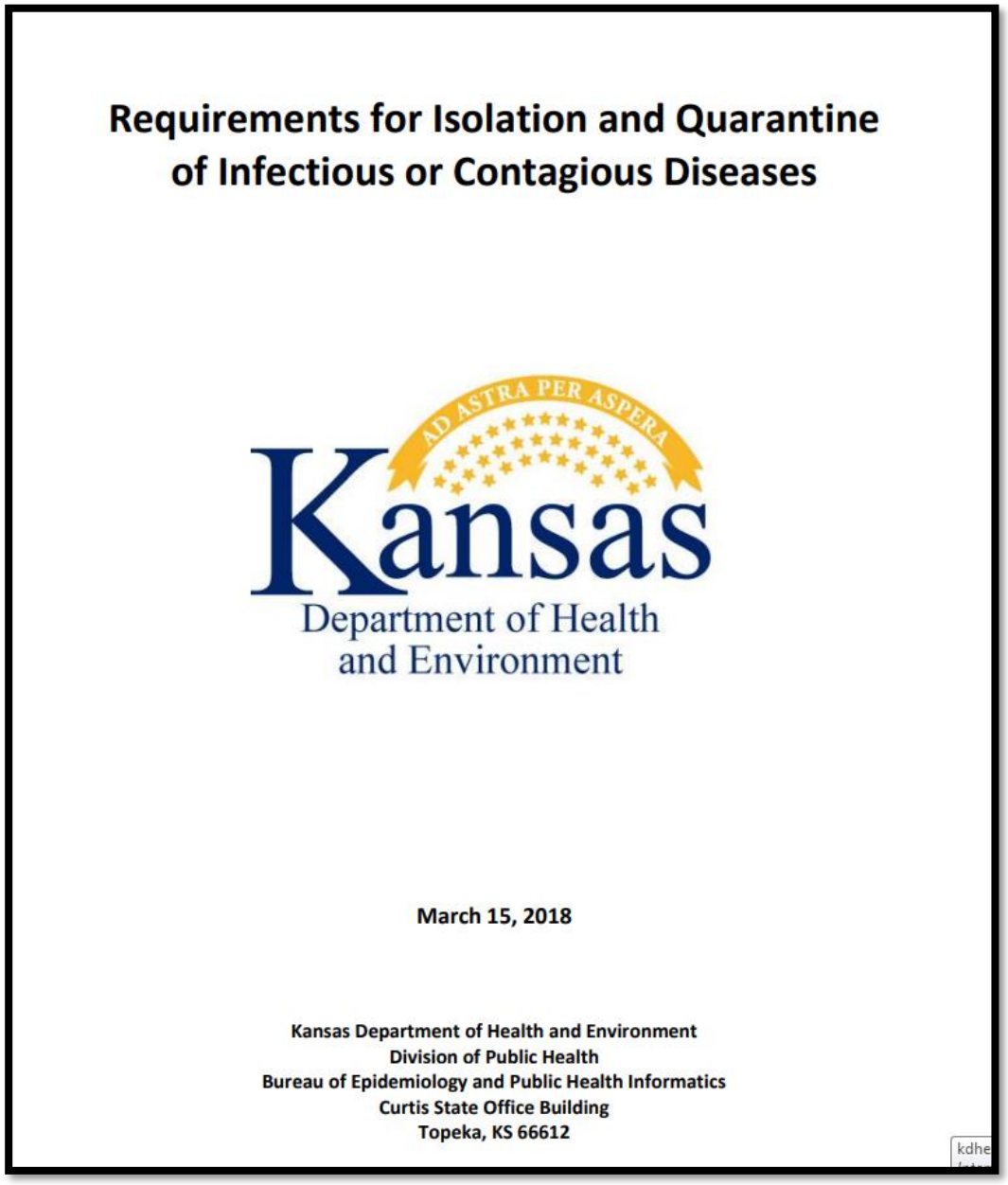
Regulations	Topic	Time
KAR 28-1-6	Isolation and Quarantine	45 minutes
KAR 28-1-13	Rabies Control	45 minutes
	Q & A	15 minutes

KAR 28-1-6
Updates to the Isolation and Quarantine of Infectious or Contagious Diseases

Kansas
Department of Health and Environment

Rationale: Isolation and Quarantine

- Last revised: 2007
- Need to incorporate current recommendations
- Problems with previous regulations
  - 24-hour vaccination requirement after VPD report to public health
  - Susceptible health care workers not excluded from work after VPD exposure
  - Outdated terminology
- Guidance document to be adopted by reference
  - Requirements for isolation and quarantine for some conditions are complex
  - Regulatory format is limiting



Requirements for Isolation and Quarantine of Infectious or Contagious Diseases

Kansas
Department of Health and Environment

March 15, 2018

Kansas Department of Health and Environment
Division of Public Health
Bureau of Epidemiology and Public Health Informatics
Curtis State Office Building
Topeka, KS 66612

http://www.kdheks.gov/epi/download/KDHE_Requirements_for_Isolation_and_Quarantine.pdf

Prevention and Control for Specific Diseases

- a.k.a. “isolation and quarantine”
- Scaled measures of prevention and control
- Consistent with epidemiology and current scientific recommendations
- Updated terms
  - Contact, droplet, and airborne precautions
- Conditions not subject to isolation or quarantine are listed

Changes to Format

- Guidance document will include specific details regarding:
  - Control of Cases
  - Control of Contacts
- Disease are alphabetized
- Definitions

Isolation and Quarantine

- May be altered by the local health officer or the secretary of KDHE
  - Necessary for public health
- Based on current medical knowledge
  - Incubation
  - Communicable period
  - Mode of Transmission
  - Susceptibility

Susceptible Person

- Person who is
  - Exposed to a person with an infectious or contagious disease
  - Exposed to a contaminated environment
  - Criteria
    - Has no history of disease, documented by a physician, that would confer lifetime immunity; **and**
    - No laboratory evidence of immunity; **and**
    - No documentation of having been age appropriately vaccinated according to ACIP; **and**
    - No documentation acceptable to the secretary that demonstrates current immunity

Age Appropriately Vaccinated

- Documentation of age-appropriate vaccination with MMR and Varicella
  - One dose for preschool-aged children > 12 months
  - Two doses for children in kindergarten through 12th grade
  - Two doses for health-care personnel

CDC. (2013). Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps. MMWR. 62.
CDC. (2007). Prevention of Varicella. MMWR. 56..

Enteric Diseases

Enteric Diseases – Control of Cases

Amebiasis

Exclusion
- Food Employee
- Healthcare worker
- Attending child care
- Working in child care

Campylobacter
Giardiasis
Salmonellosis
Vibriosis

Cryptosporidiosis

No exclusions for contacts

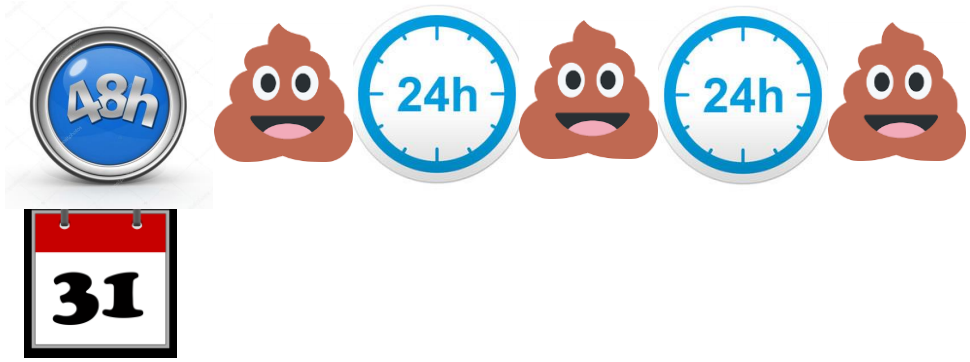
Enteric Diseases – Control of Cases

Exclusion
- Food Employee
- Healthcare worker
- Attending child care
- Working in child care

Shiga toxin-producing *Escherichia coli*

Shigellosis

Typhoid Fever



No exclusions for contacts

Drug Resistant Organisms

Kansas
Department of Health and Environment

Candida auris, Carbapenem-Resistant Bacteria – Control of Cases

- Contact precautions for persons infected or colonized
- No other isolation requirements

No exclusions for contacts

Kansas Department of Health and Environment

Clostridium difficile, VISA, or VRSA Infections

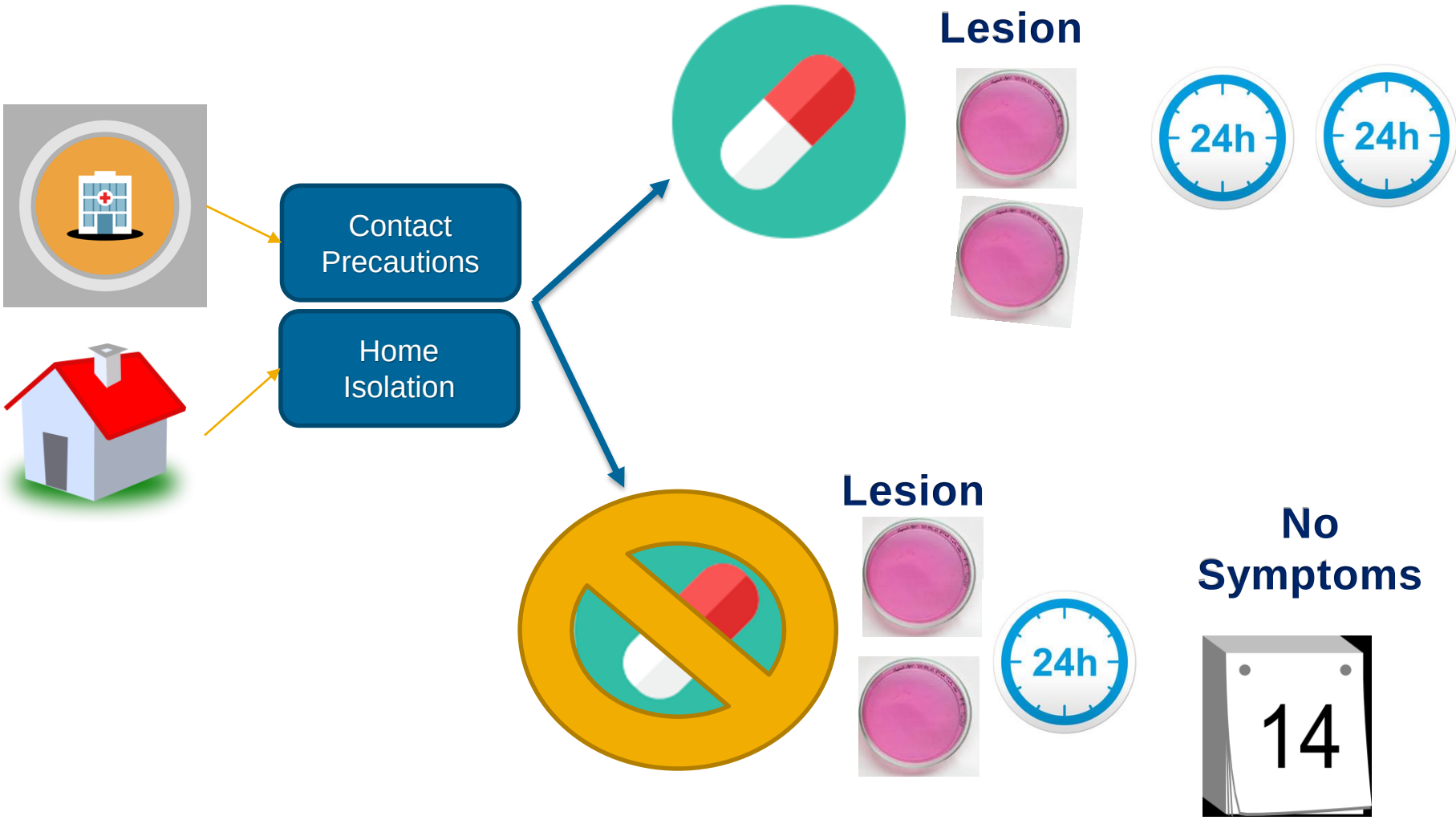
- Contact precautions for persons during acute illness
- No other isolation requirements

No exclusions for contacts

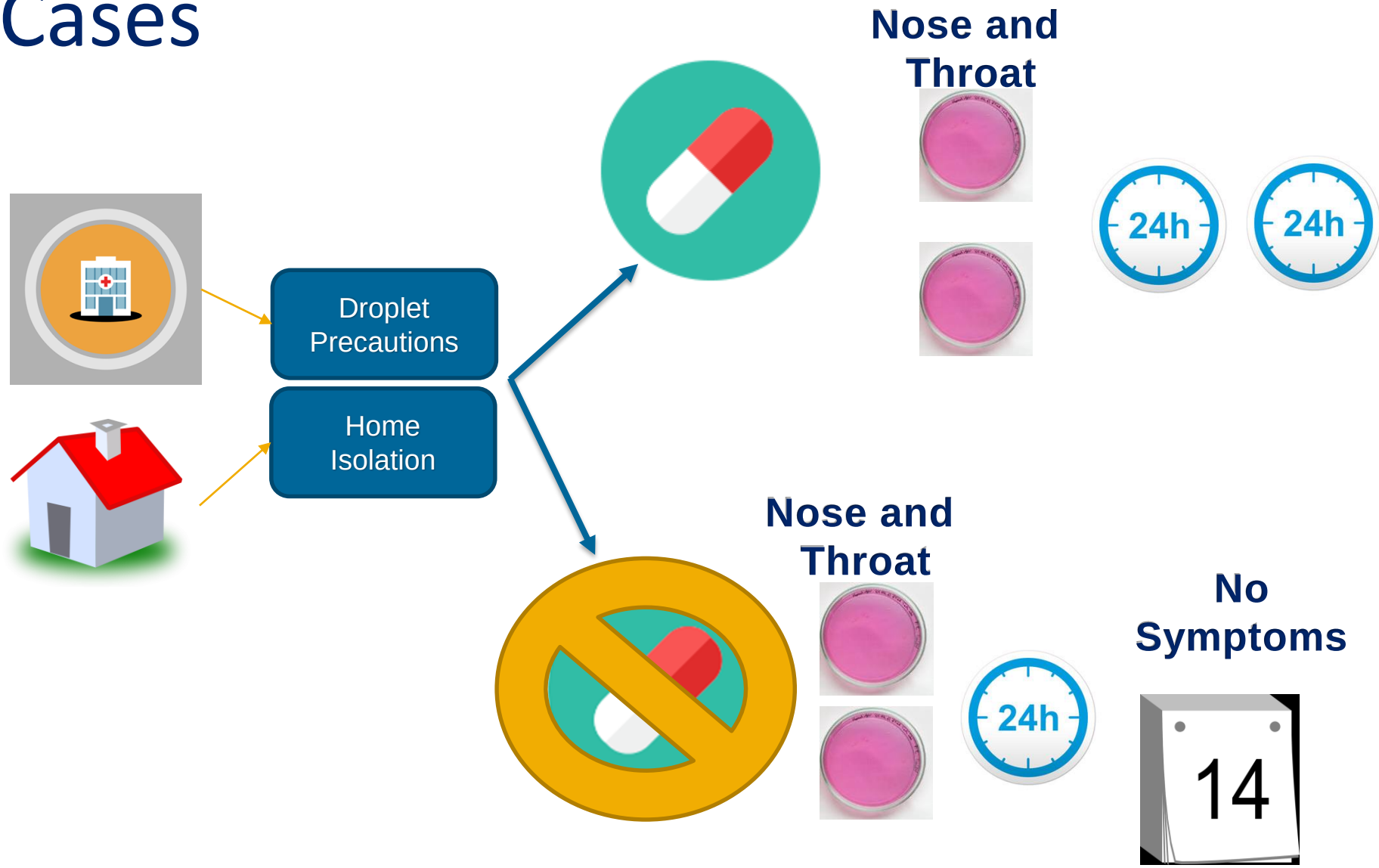
Vaccine Preventable Diseases

Kansas
Department of Health and Environment

Cutaneous Diphtheria - Control of Cases



Pharyngeal Diphtheria – Control of Cases



Pharyngeal Diphtheria – Control of Contacts

- Regardless of immunization status
- Monitor for 7 days
- Both nose and throat specimens cultured
  - If positive, consider same as case

No exclusion for contacts of cutaneous diphtheria

Pharyngeal Diphtheria – Control of Contacts

Exclusion

- Food Employee
- Healthcare worker
- Attending or working in child care facility, school, or adult day care

Nose and Throat

28 Days

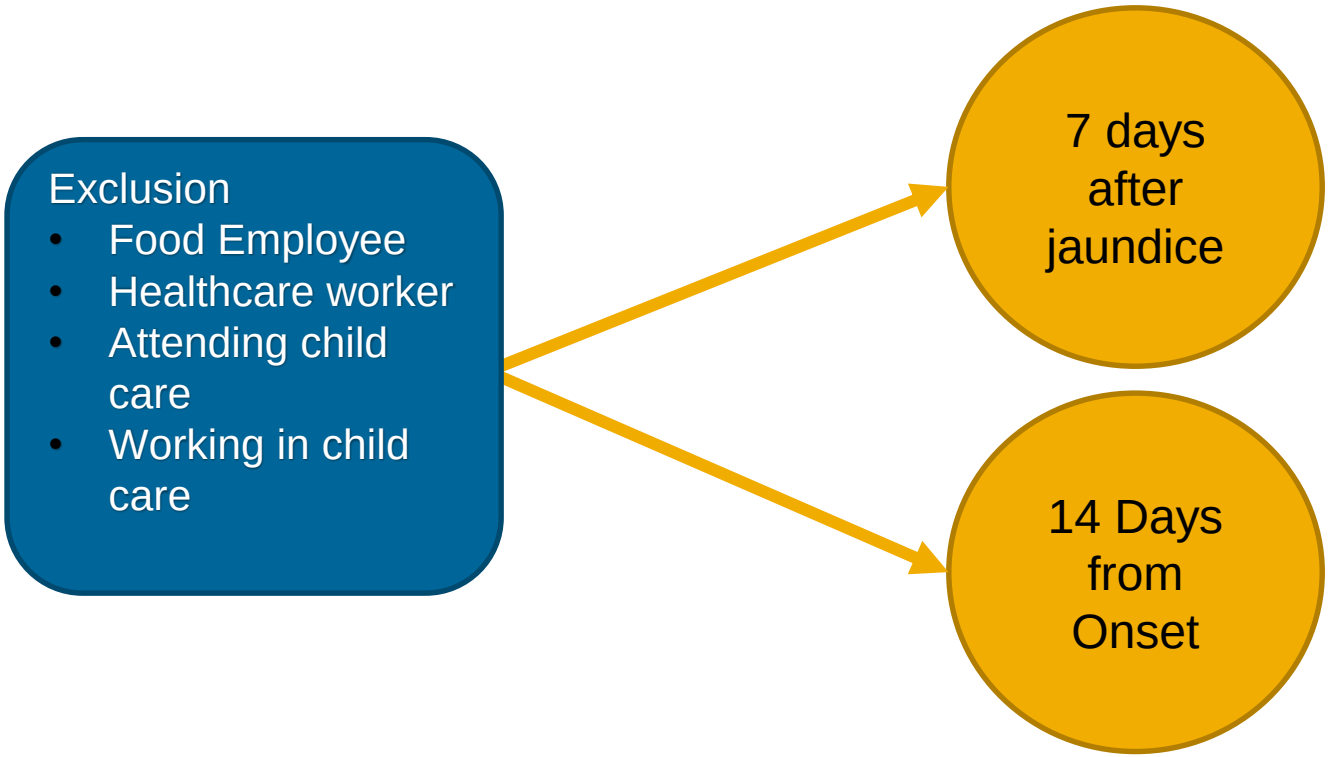
Haemophilus influenzae, invasive disease – Control of Cases

Droplet precautions for 24 hours after initiation of antibiotics

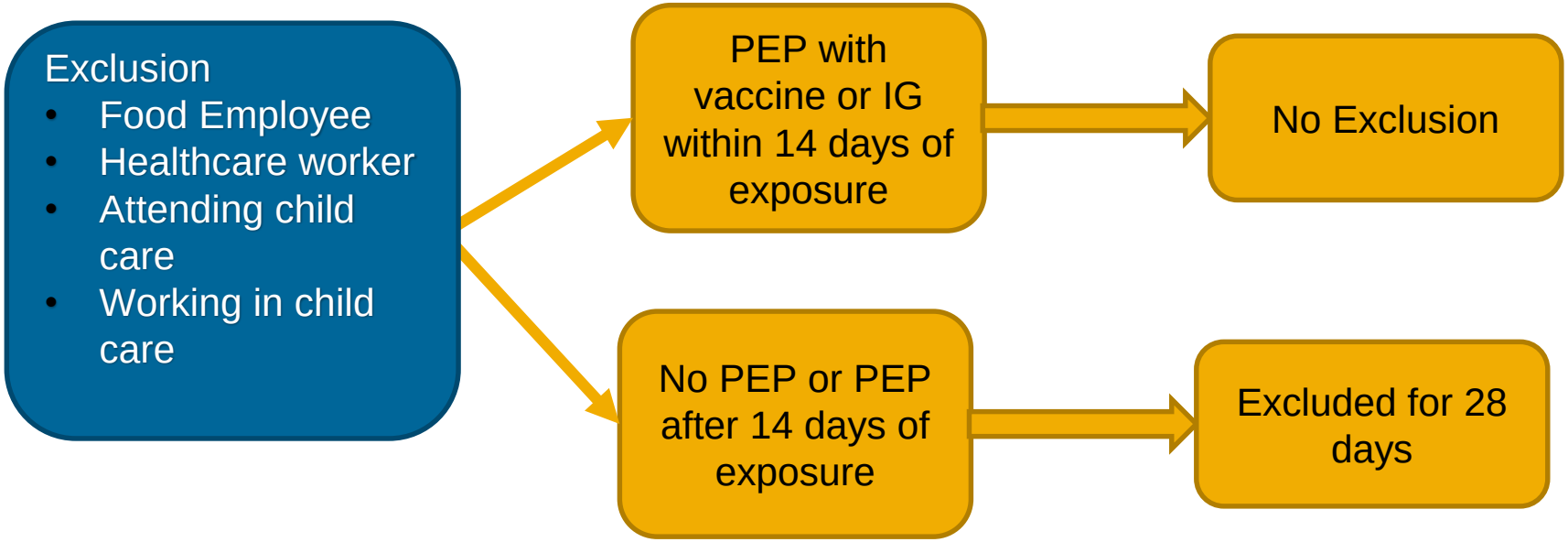
No exclusions for contacts

Kansas Department of Health and Environment

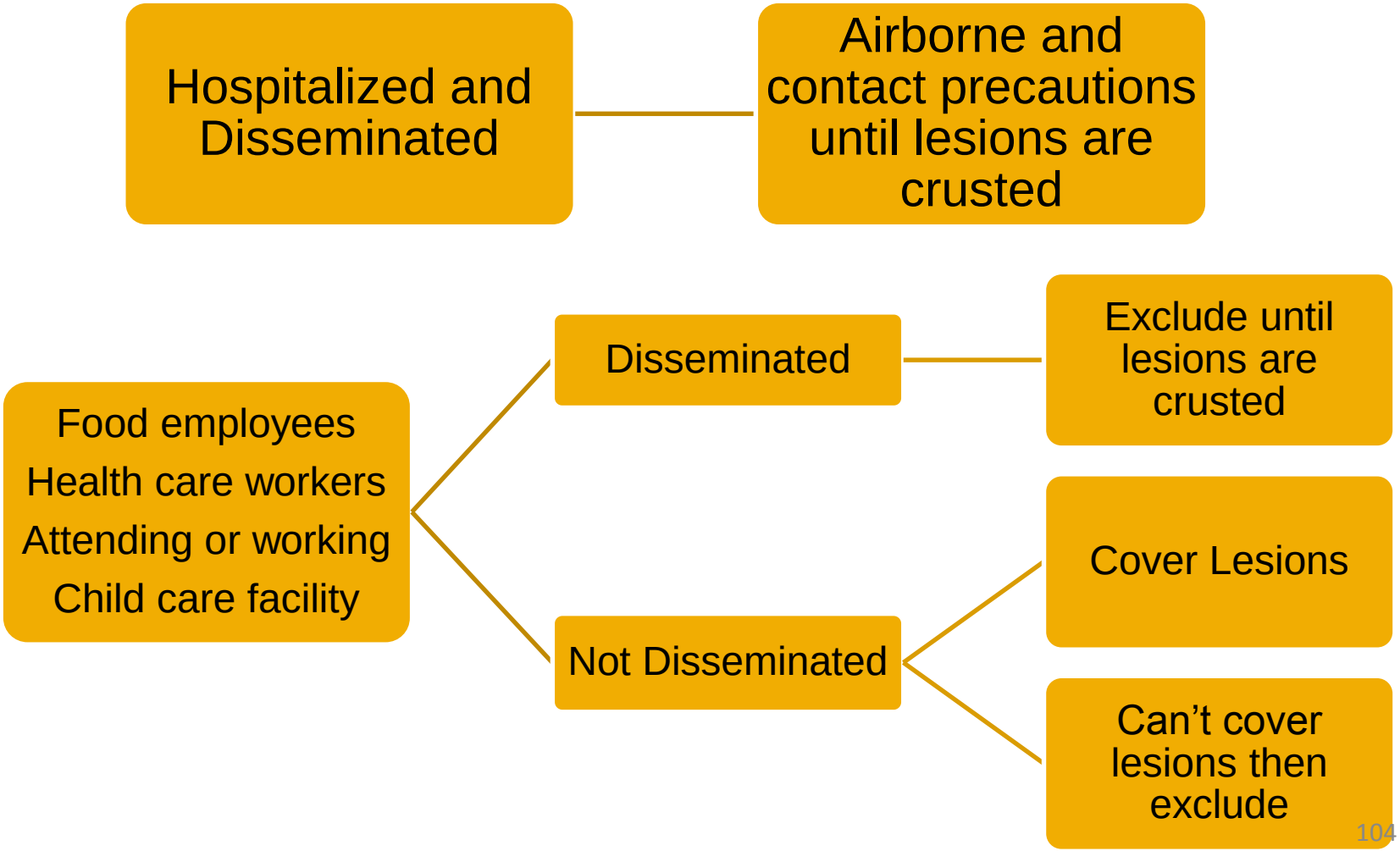
Hepatitis A – Control of Cases



Hepatitis A – Control of Contacts



Herpes Zoster Virus (Shingles) – Control of Cases



Influenza – Control of Cases

- Droplet precautions for seven days
- Immunocompromised for duration of illness

- Home isolation for seven days
- Immunocompromised for duration of illness
- Unless seeking medical care

No regulations for contacts

Measles – Control of Cases

Airborne precautions for four days following rash onset

Home isolation for four days following rash onset

- Except when seeking medical care

Kansas Department of Health and Environment

Measles – Control of Contacts

Exclusion for Susceptible Contacts

- Working in an adult care home, correctional facility, or health care facility
- Attending or working in child care facility, school, or adult day care

21 days from last exposure

Age Appropriately

72 hours of first exposure

No Exclusion

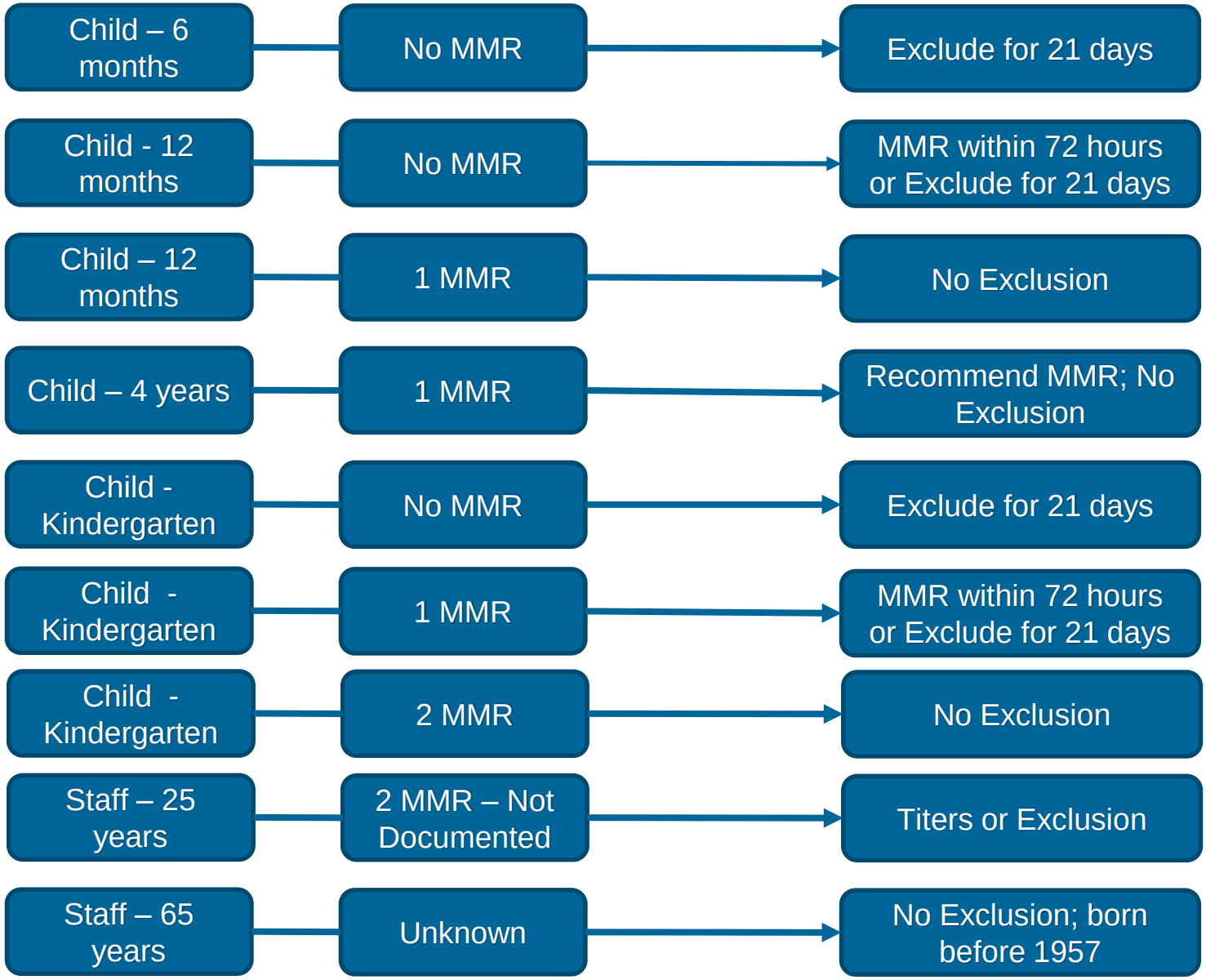
Kansas Department of Health and Environment

Measles - Scenarios

Measles in a Daycare

- An infant with suspected measles was reported to KDHE within 4 hours
- There is considerable interaction between all the children and staff at the daycare

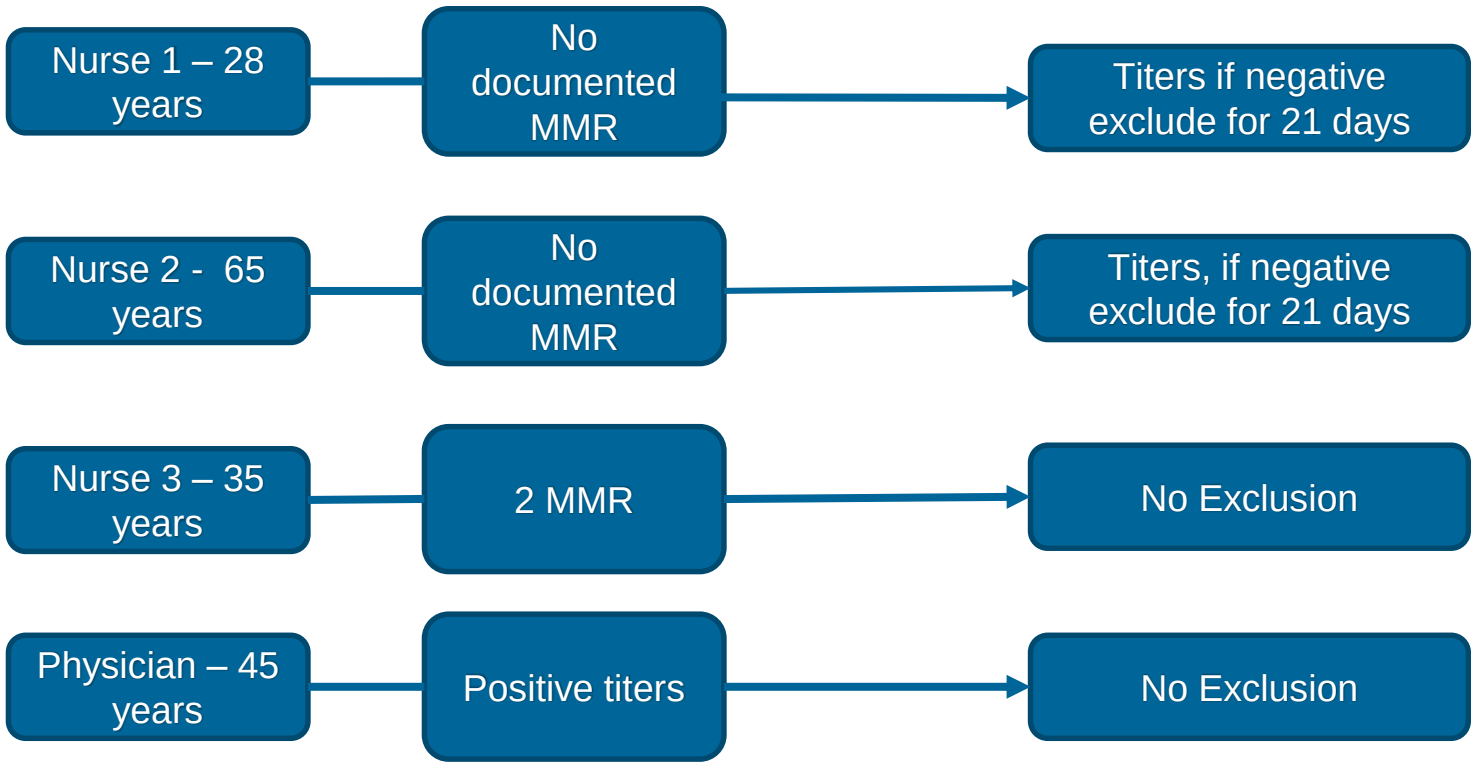
Line list of Exposed Children and Staff



Measles in a Hospital

- An unvaccinated child was admitted to the hospital with suspected measles
- The hospital reported this case to KDHE within 4 hours
- Three nurses and a physician were exposed

Line List of Exposed Staff



Meningococcal Disease

Droplet precautions until 24 hours after initiation of antibiotic therapy

No regulation for non-hospitalized persons or contacts

Kansas Department of Health and Environment

Mumps – Control of Cases

Droplet precautions

- Nine days following onset of any symptom
- Five days after onset of parotitis

In home isolation

- Nine days following onset of any symptom
- Five days following the onset of parotitis
- Except when seeking medical care

Kansas Department of Health and Environment

Mumps – Control of Contacts

Exclusion for Susceptible Contacts

- Working in an adult care home, correctional facility, or health care facility
- Attending or working in child care facility, school, or adult day care

12 to 25 days from last exposure

No post-exposure vaccination to allow return to school or work site

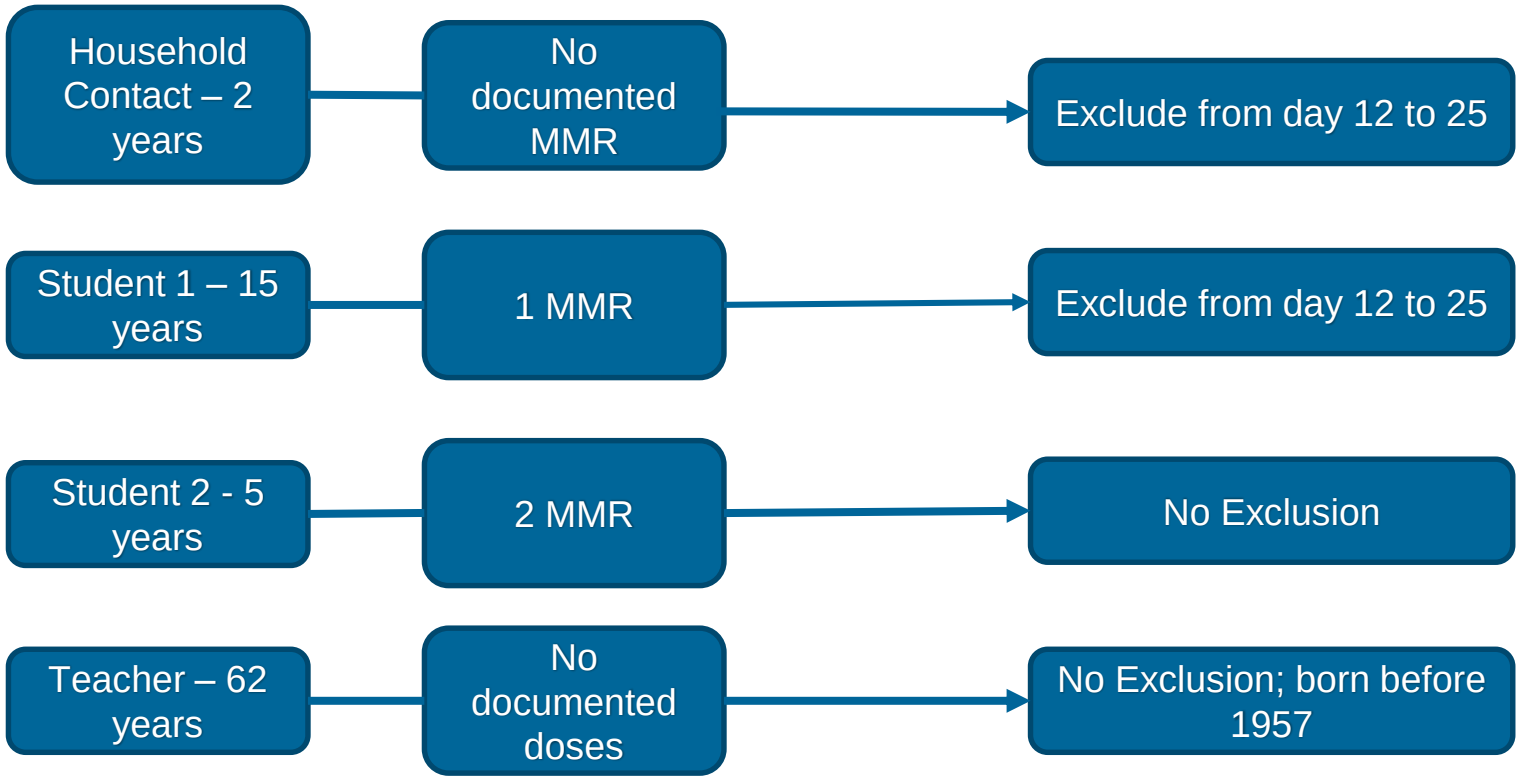
Kansas Department of Health and Environment

Mumps Scenario

Mumps in a School

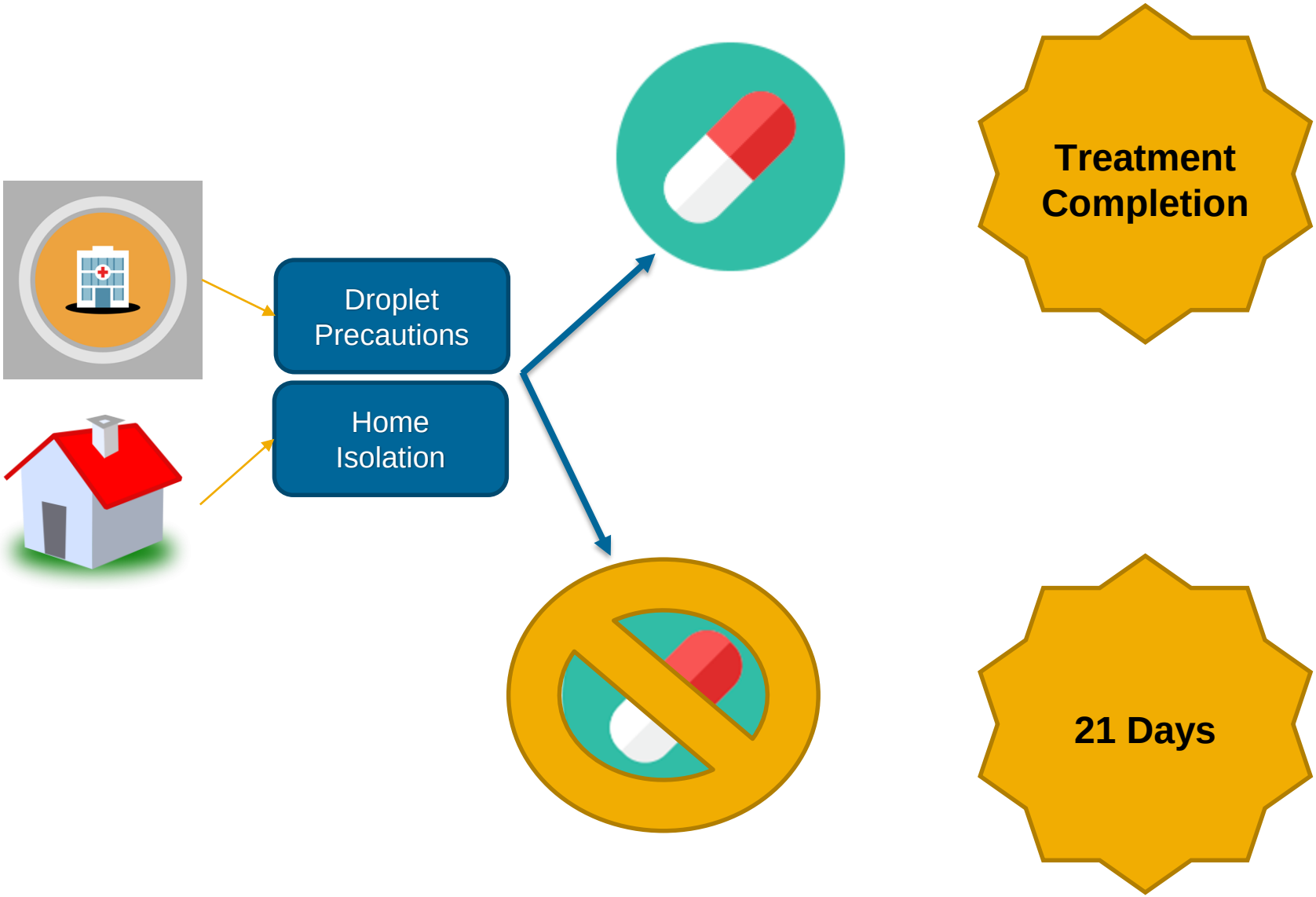
- A 15 year old child was diagnosed with mumps and KDHE was notified by telephone with 4 hours
- Exposed persons were identified
  - One household contact that attends daycare
  - Two student contacts in a classroom
  - One teacher in a classroom

Line List of Exposed Staff



Kansas Department of Health and Environment

Pertussis – Control of Cases



Pertussis – Control of Contacts

Susceptible Contacts

- Working in an adult care home, correctional facility, or health care facility
- Attending or working in child care facility, school, or adult day care

→ **Monitor for 21 days from last exposure**

No Exclusion for Contacts

Kansas Department of Health and Environment

Poliomyelitis – Control of Cases

Contact precautions for duration of illness

No regulations for non-hospitalized cases or contacts

Kansas Department of Health and Environment

Rubella – Control of Cases

Droplet precautions for seven days after onset of rash

In home isolation for seven days after onset of rash

Rubella – Control of Contacts

Exclusion for Susceptible Contacts

- Working in an adult care home, correctional facility, or health care facility
- Attending or working in child care facility, school, or adult day care

21 days from last exposure

No post-exposure vaccination to allow return to school or work site

Varicella – Control of Cases

Airborne precautions until vesicles are dry and crusted or for six days following onset of rash

Remain in home isolation until vesicles are dry and crusted or for six days following onset of rash

Varicella – Control of Contacts

Exclusion for Susceptible Contacts

- Working in an adult care home, correctional facility, or health care facility
- Attending or working in child care facility, school, or adult day care

21 days from last exposure

Age Appropriately

72 hours of first exposure

No Exclusion

Kansas Department of Health and Environment

Other Diseases

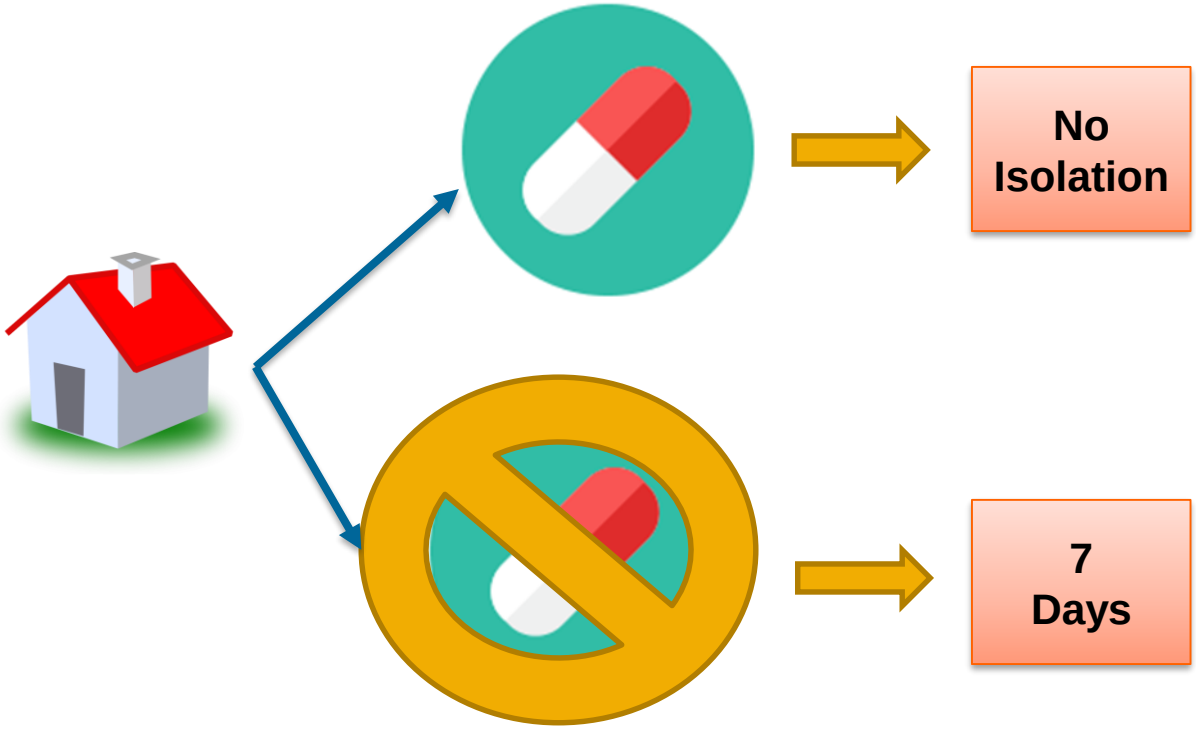
Pediculosis (head lice)

- No regulation
- CDC, American Academy of Pediatrics, and National Association of School Nurses advocate that children should not be excluded for lice or nits

Plague – Control of Cases

Droplet Precautions

Plague – Control of Cases



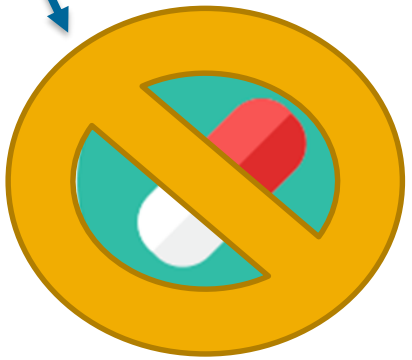
Streptococcal Disease – Control of Cases

Exclusion

- Food Employee
- Attending child care or school
- Working in child care or school

Droplet Precautions

Home Isolation



No regulations for contacts

Vaccinia – Control of Cases

Contact precautions duration of acute illness and lesions are dry and crusted

No regulation for non-hospitalized persons or contacts

Viral hemorrhagic fevers

Droplet precautions

Airborne precautions if performing aerosol-generating procedures

No regulation for non-hospitalized persons or contacts

Kansas Department of Health and Environment

Discussion / Questions

Kansas
Department of Health and Environment